

FIGURE 1

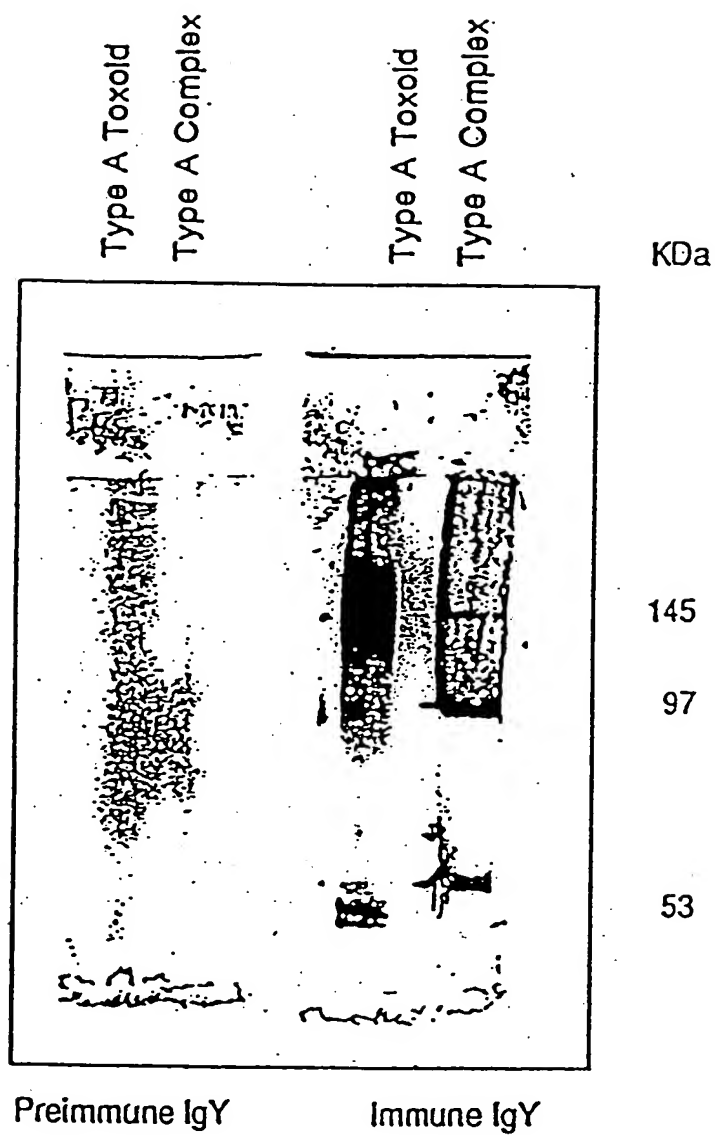


FIGURE 2

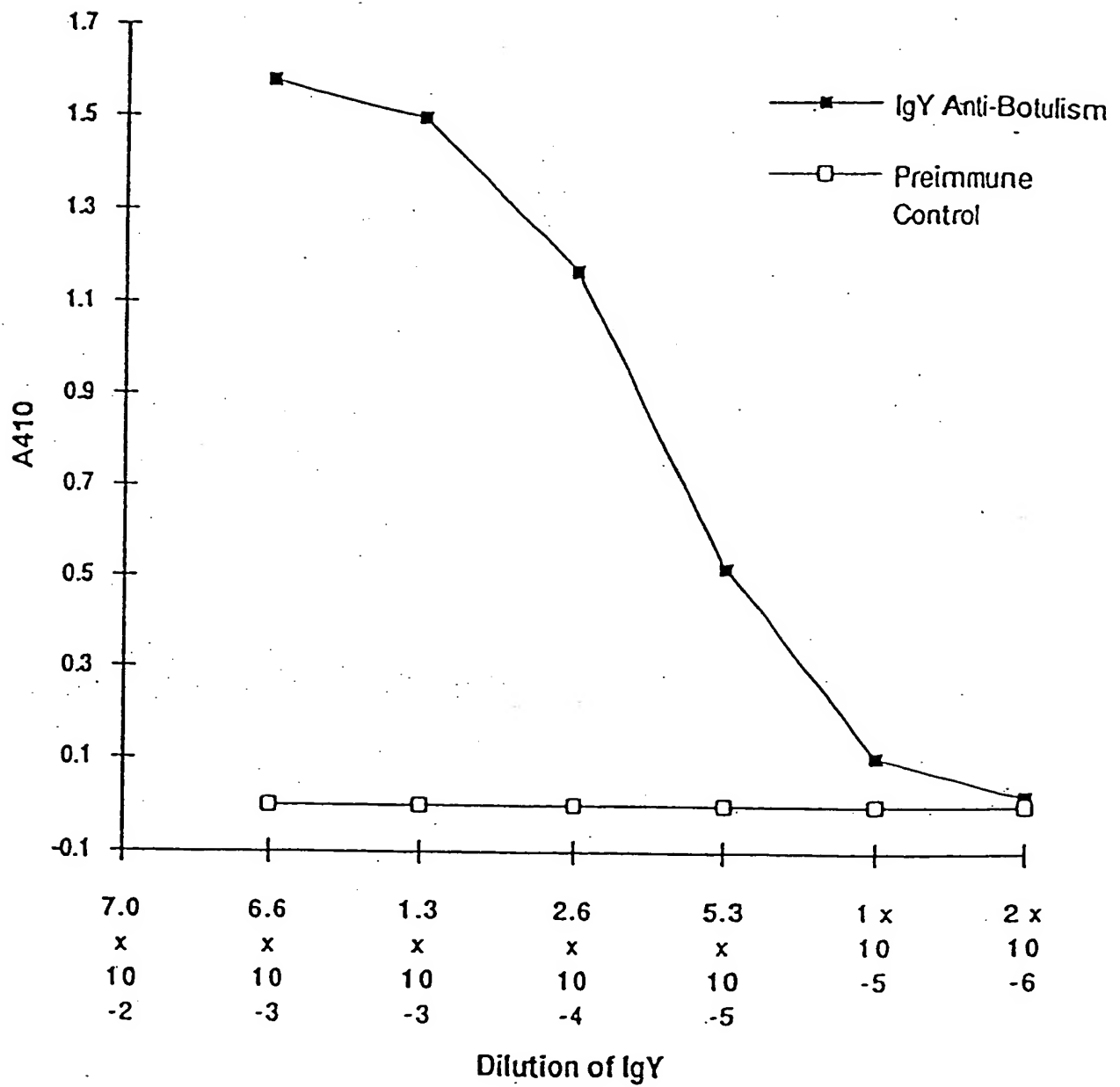


FIGURE 3

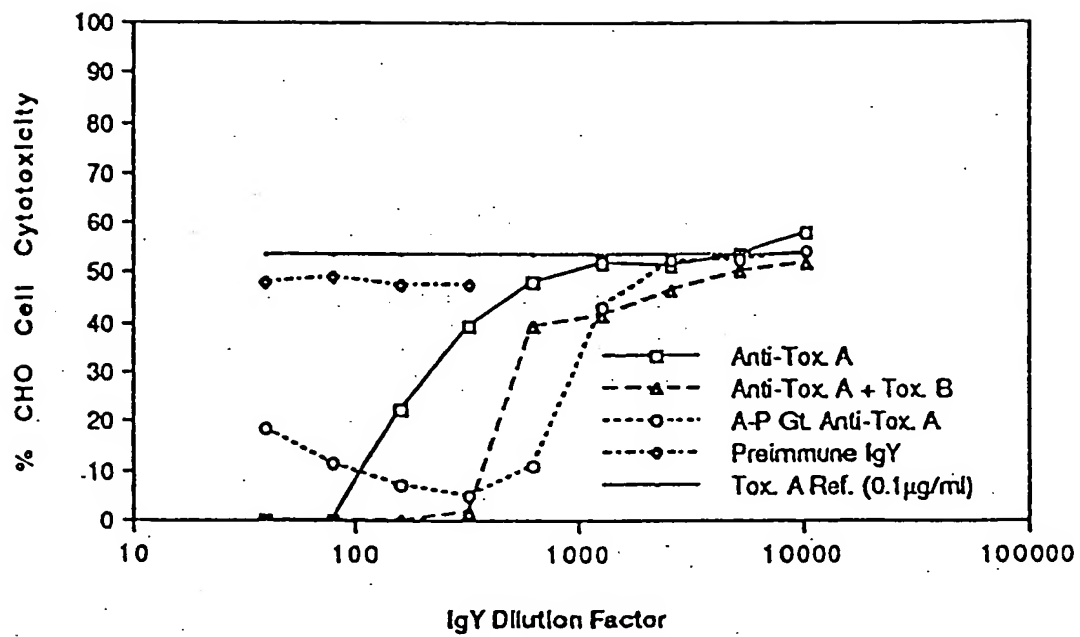


FIGURE 4

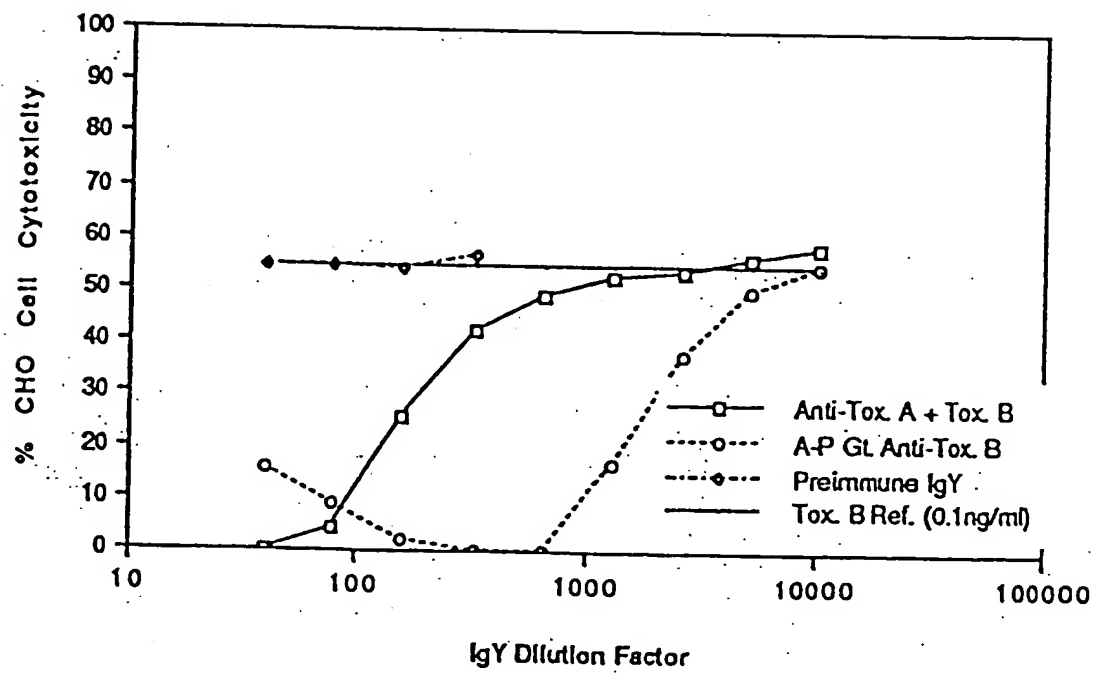


FIGURE 5

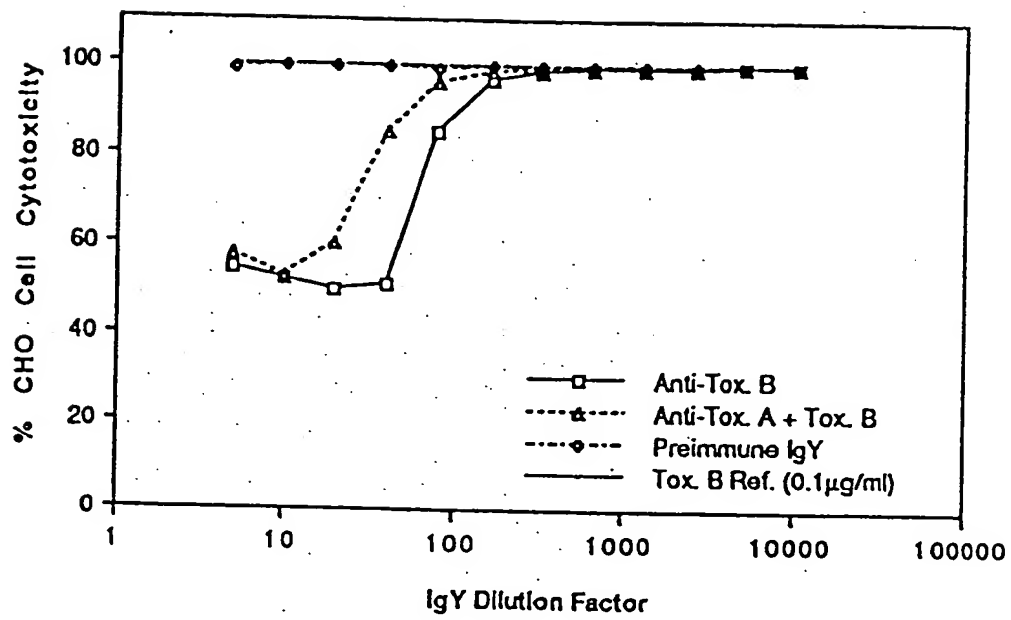
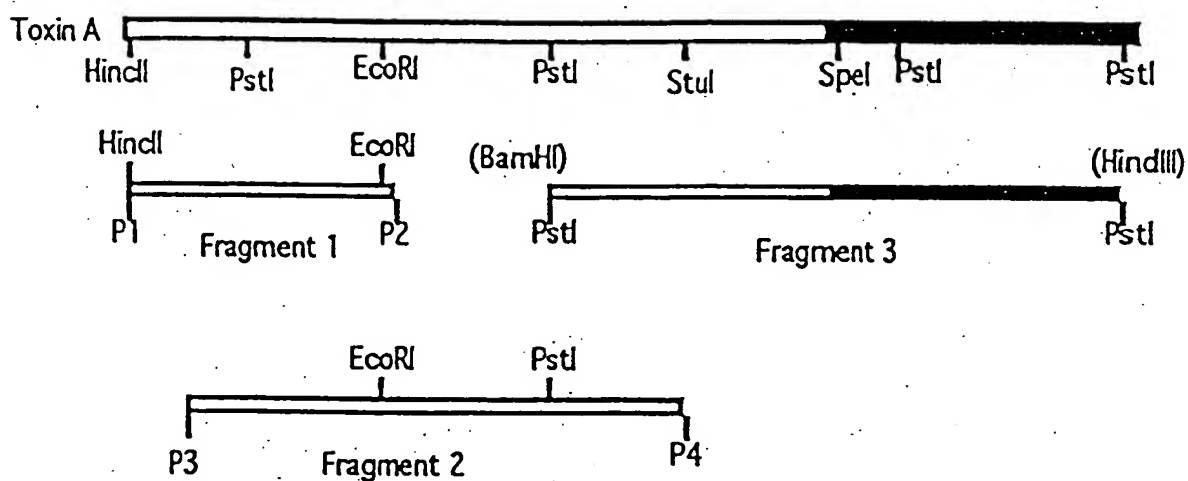
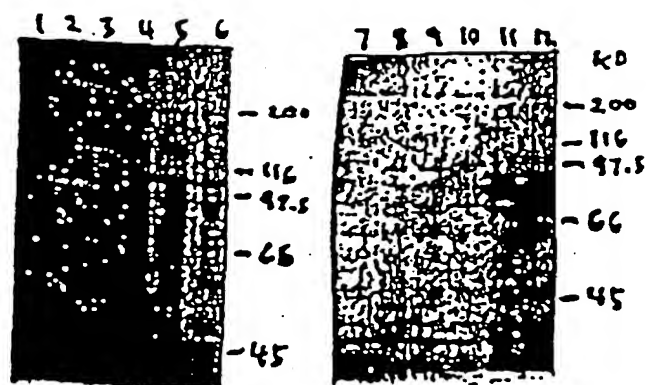


FIGURE 6



P1-P4 are PCR primers 1-4. P1=5'GGAAATTTAGCTGCAGCATCTGAC3', P2=5'TCTAGCAAATTCGCTTGTGTTGAA3', P3=5'CTGCATATAGCATTAGACC3', P4=5'CTATCTAGGCCTAAAGTAT3'. Indicated restriction sites in fragments 1 and 2 are internal sites used to clone into pGEX2T vector (fragment 1; construct called pGA30-660) or pMALc vector (fragment 2; construct called pMA660-1100). Bracketed restriction sites at ends of fragment 3 are pUC9 polylinker sites utilized to clone fragment 3 into pET23 vector (construct called pPA1100-2680). Numbers in these constructs refer to toxin A amino acid interval that is expressed. The shaded portion of the toxin A gene corresponds to the repeating ligand binding domain.

FIGURE 7



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FIGURE 8

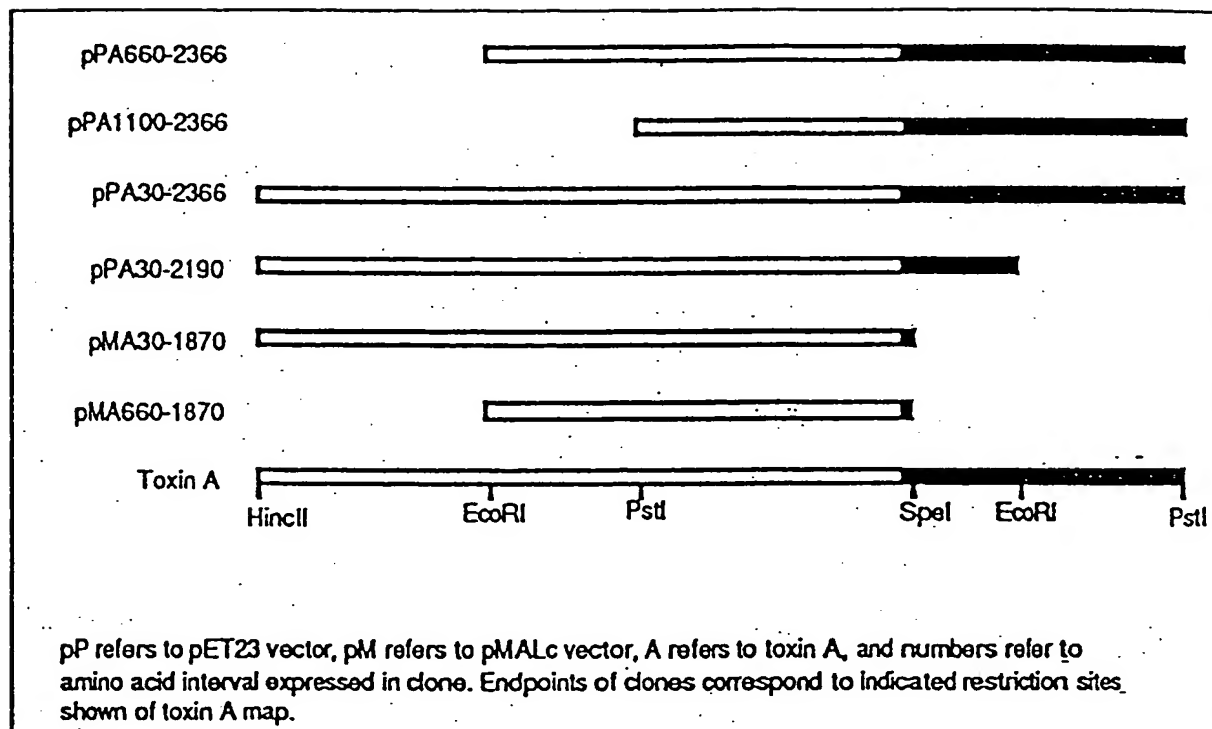




FIGURE 9

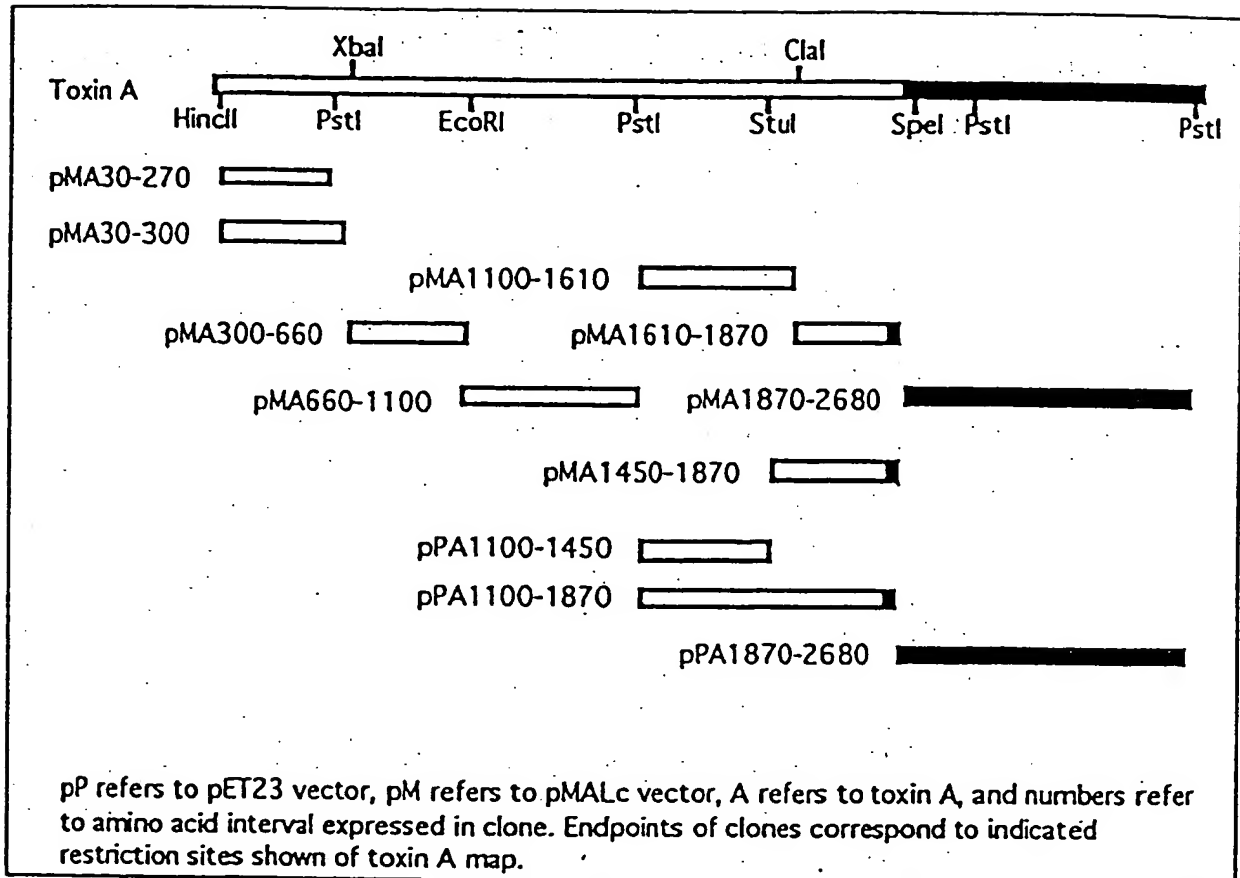
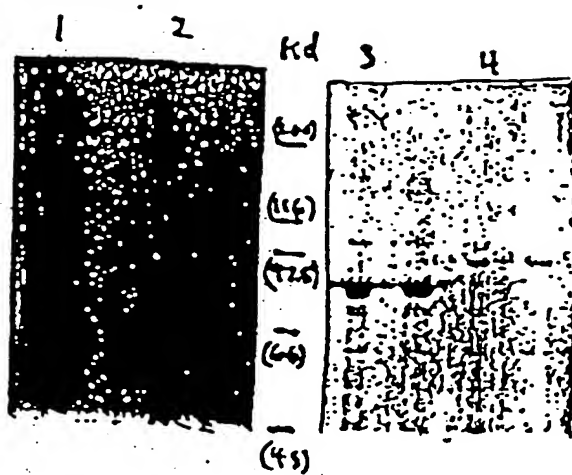


FIGURE 10



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FIGURE 11

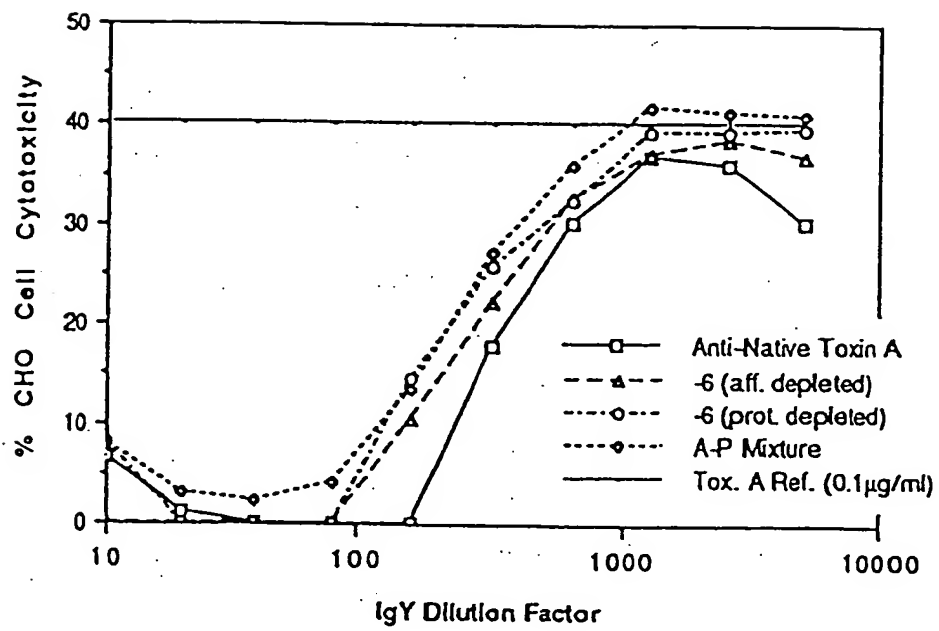


FIGURE 12

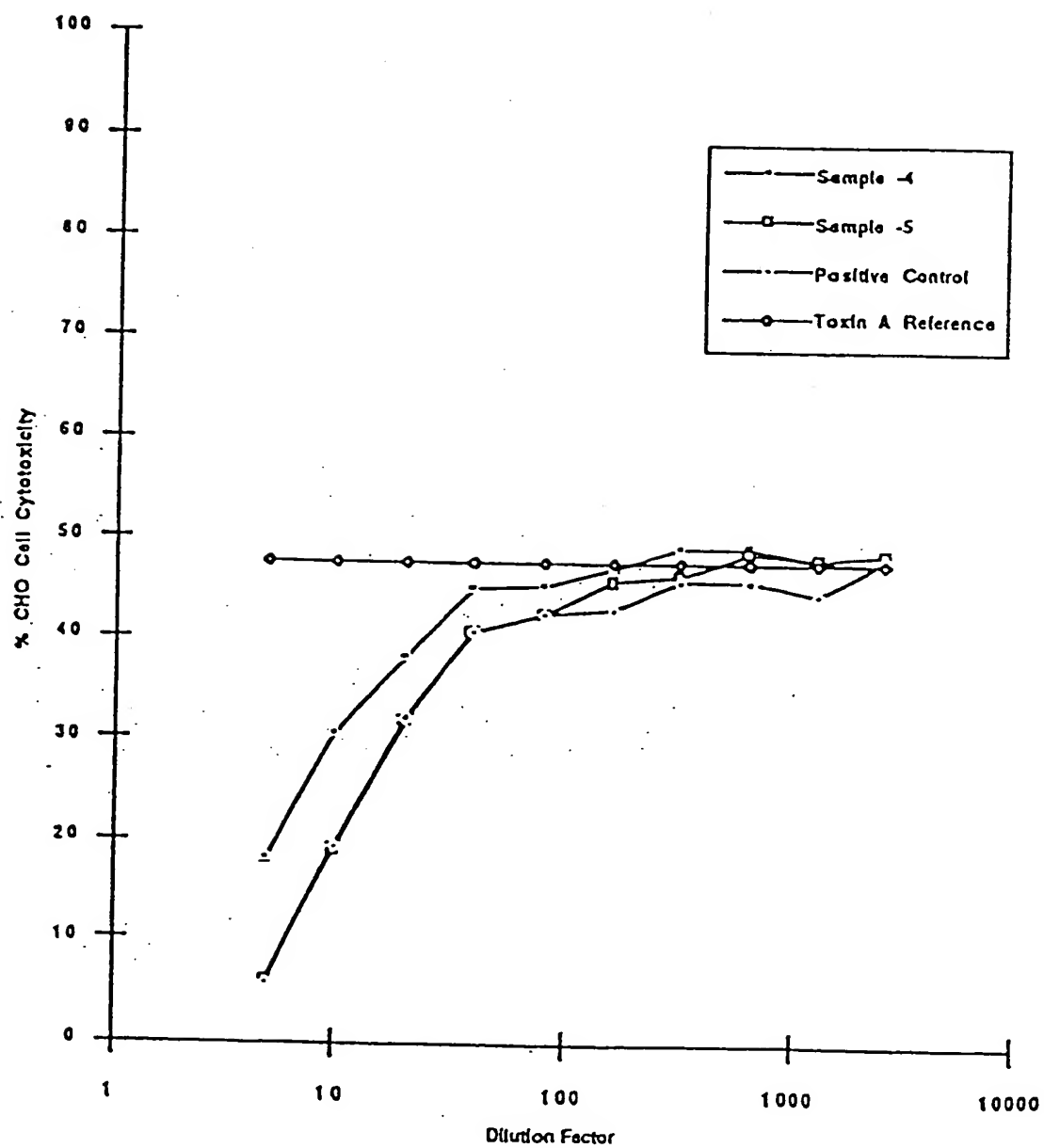


FIGURE 13

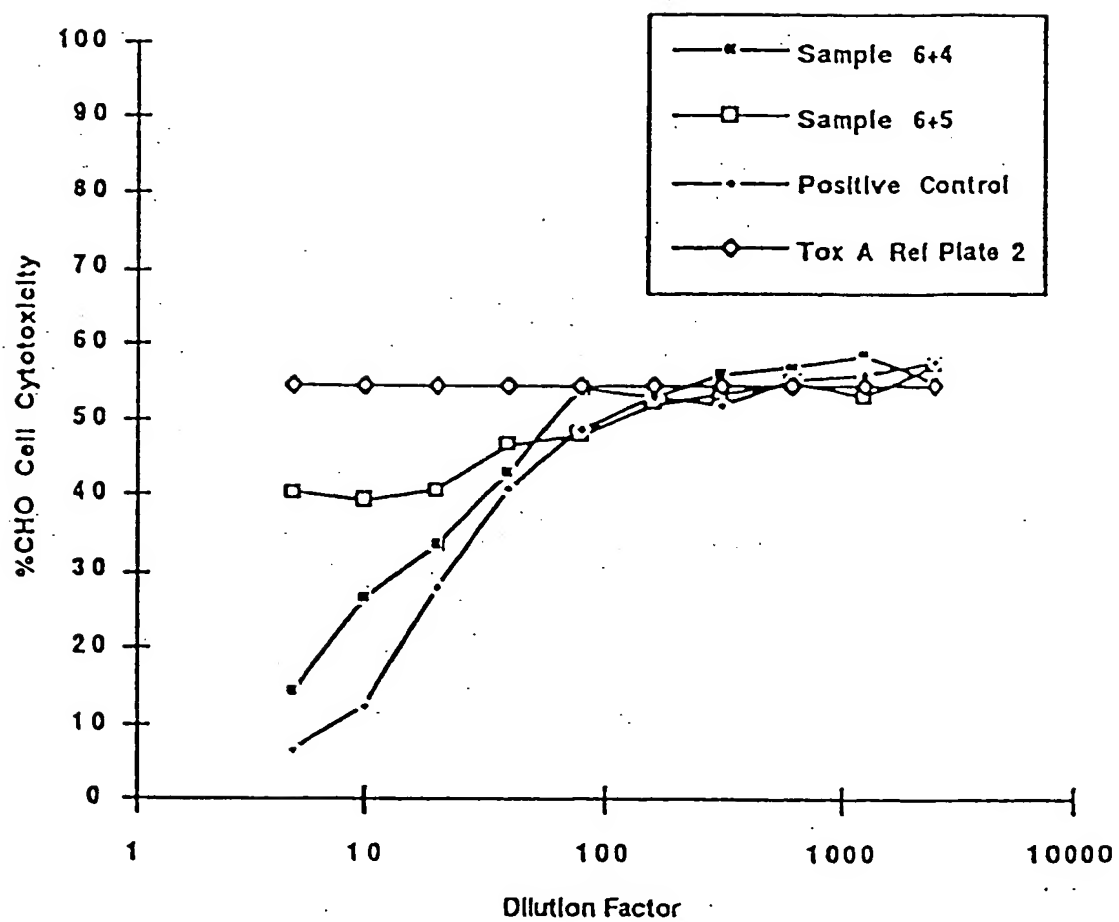


FIGURE 14

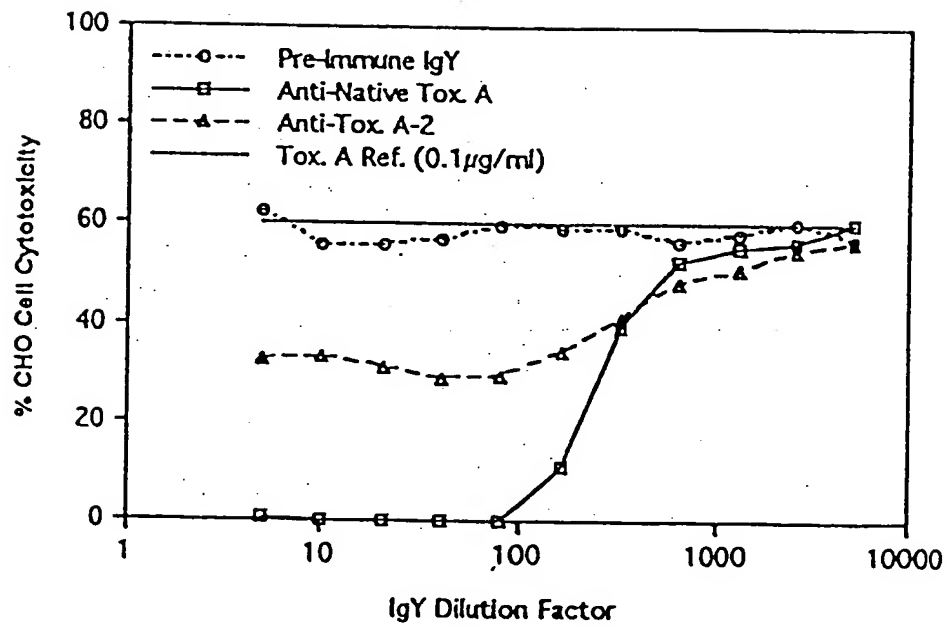
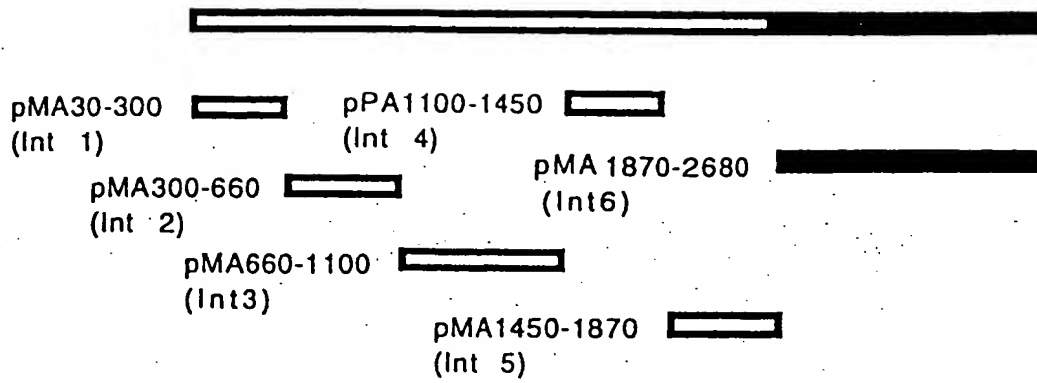


FIGURE 15

A



B

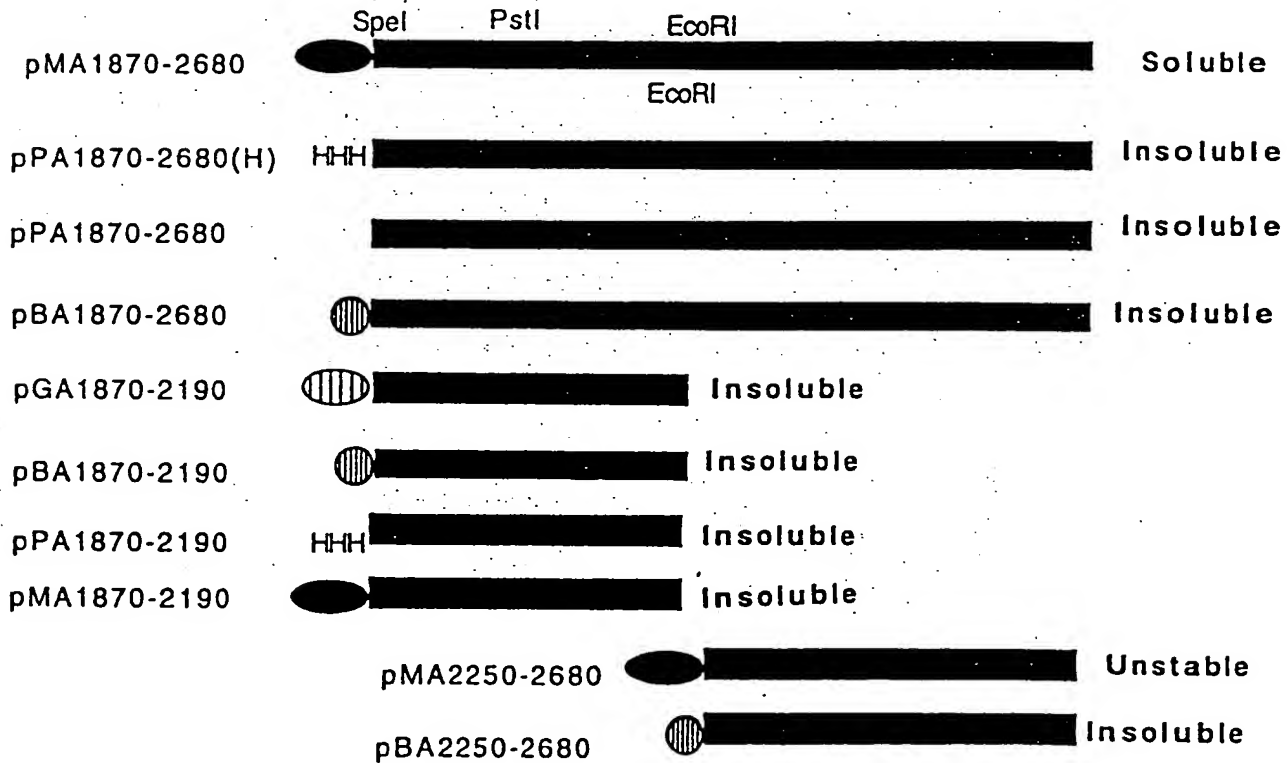


FIGURE 16

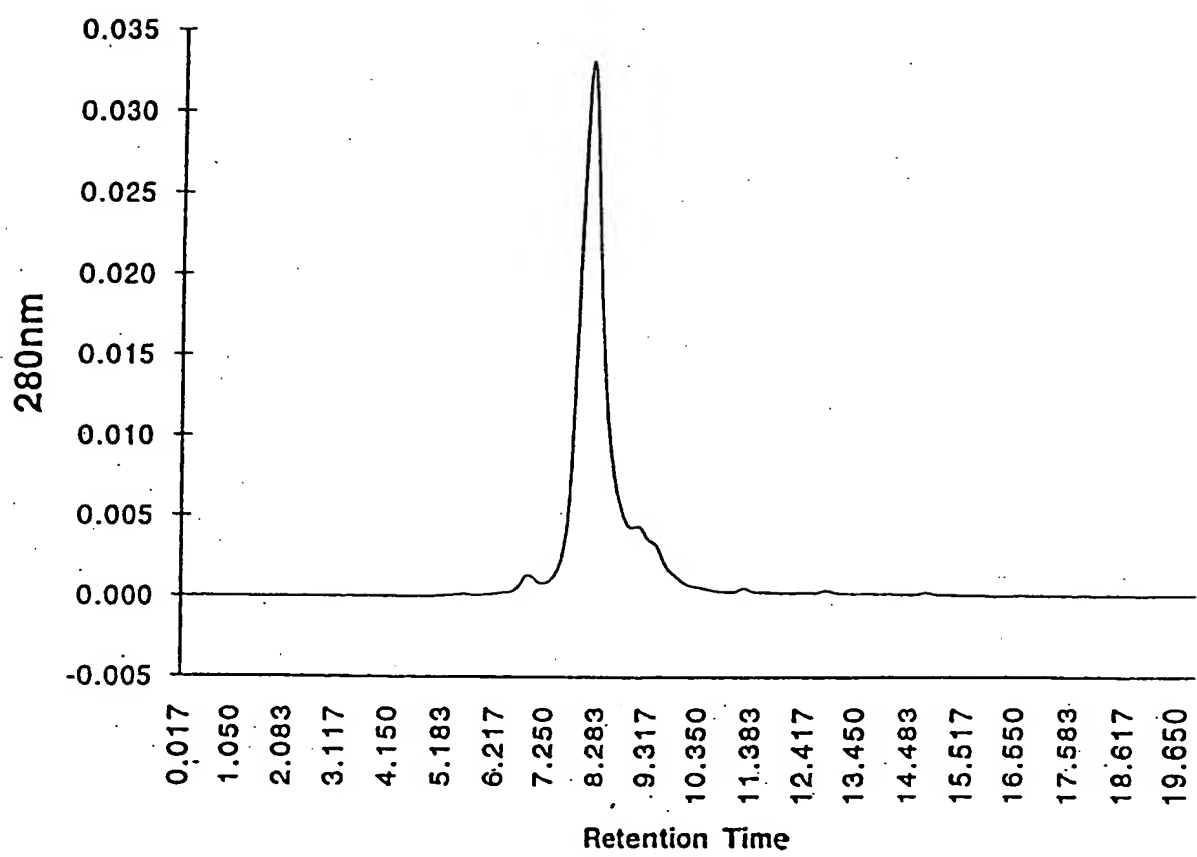




FIGURE 17

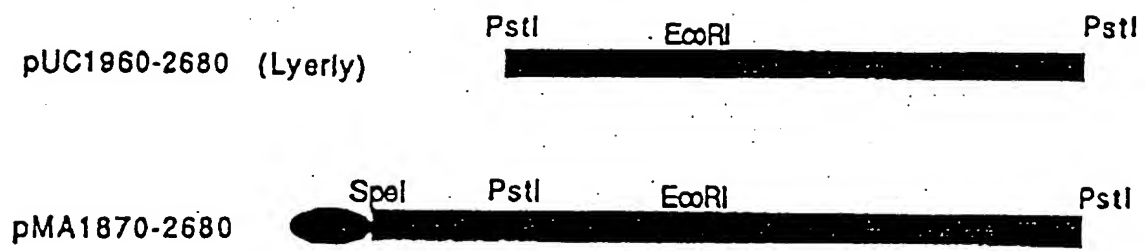


FIGURE 18

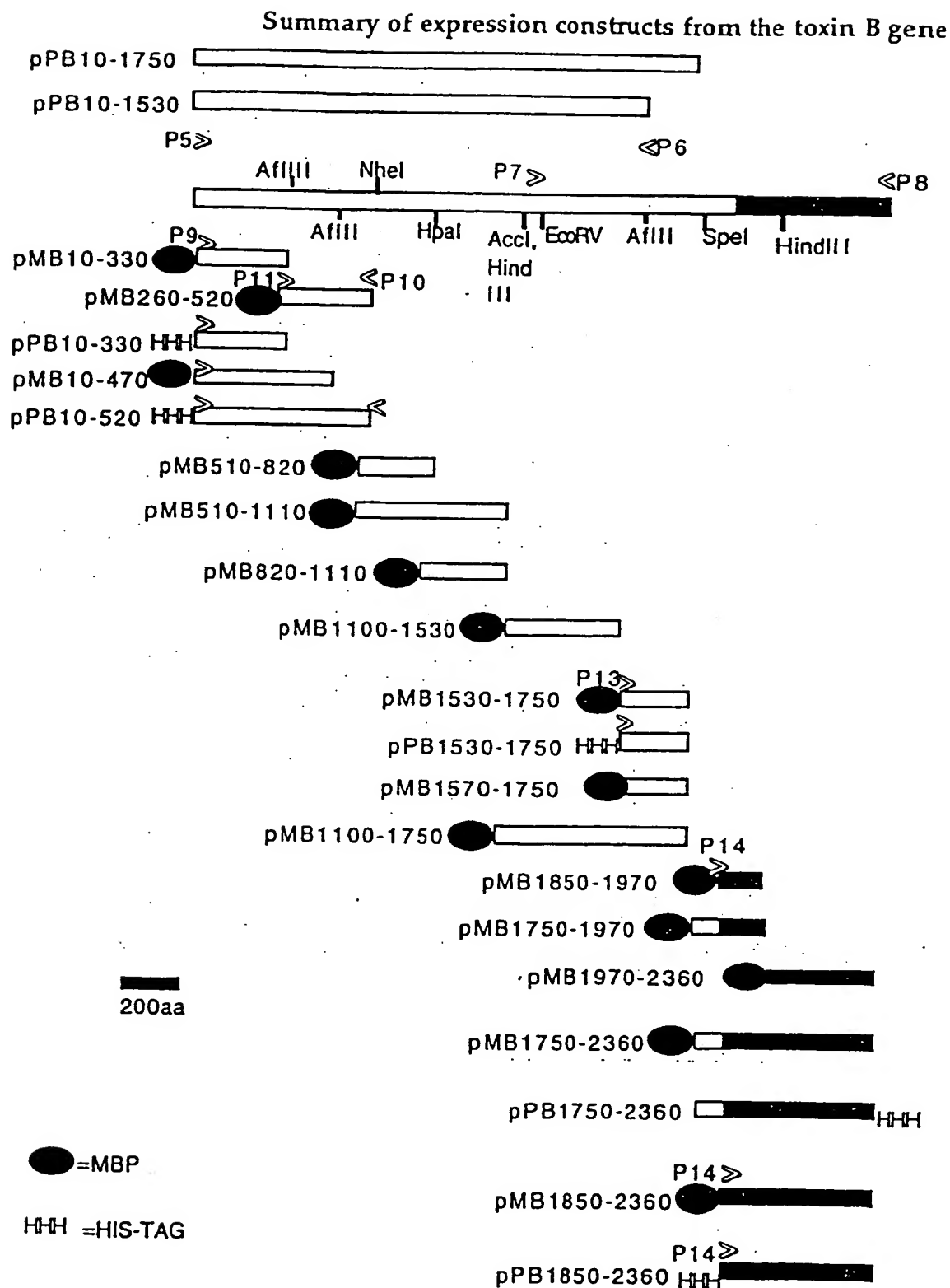


FIGURE 19

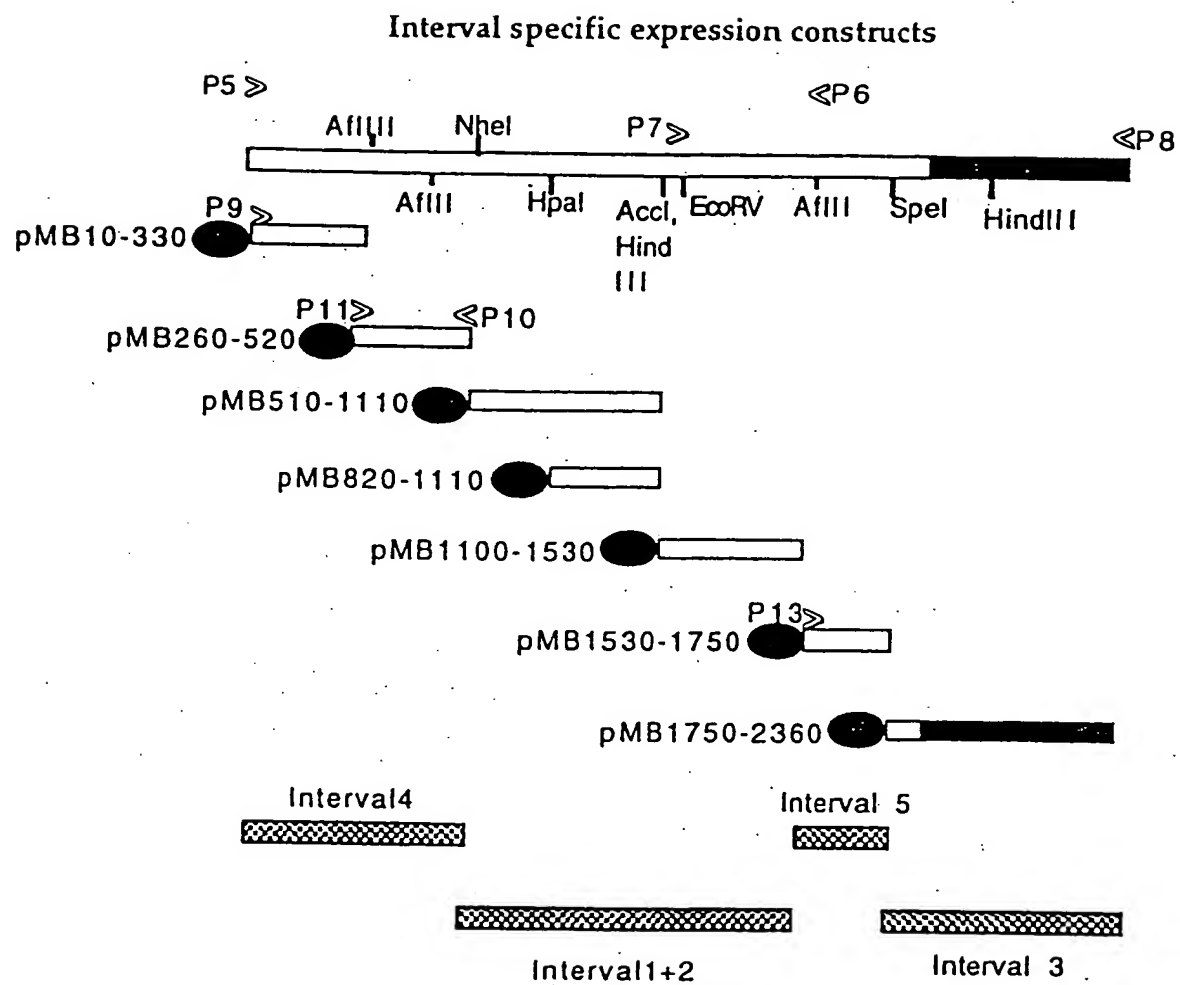


FIGURE 20

Expression constructs from the interval 3 region

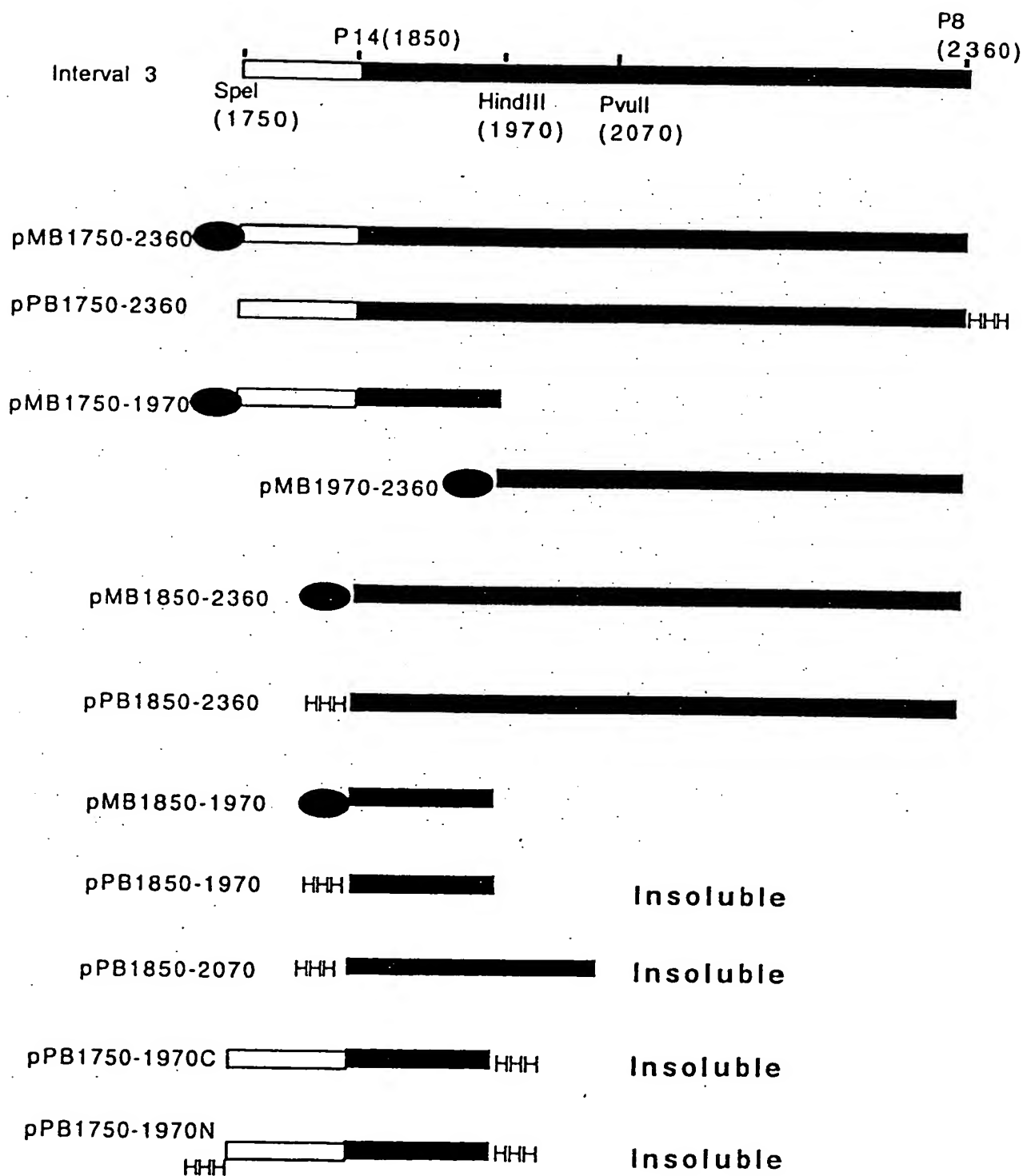
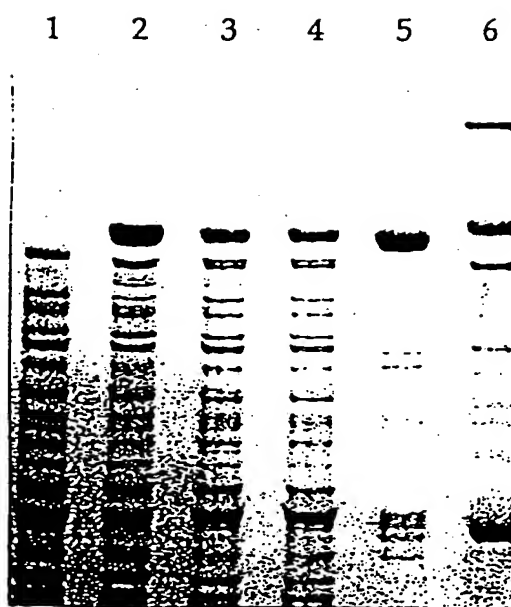


FIGURE 21



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FIGURE 22

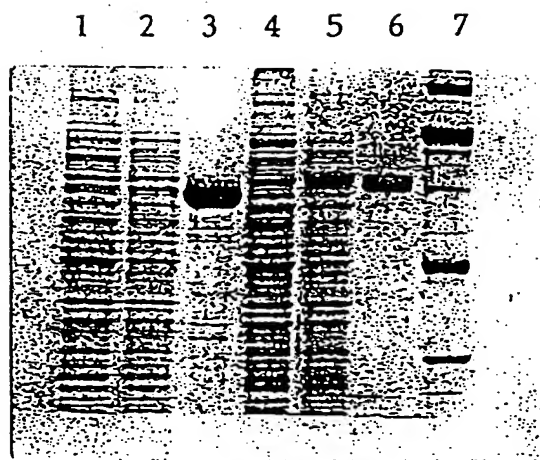


FIGURE 23

Binding of neutralizing CTB antibodies by recombinant toxin B protein

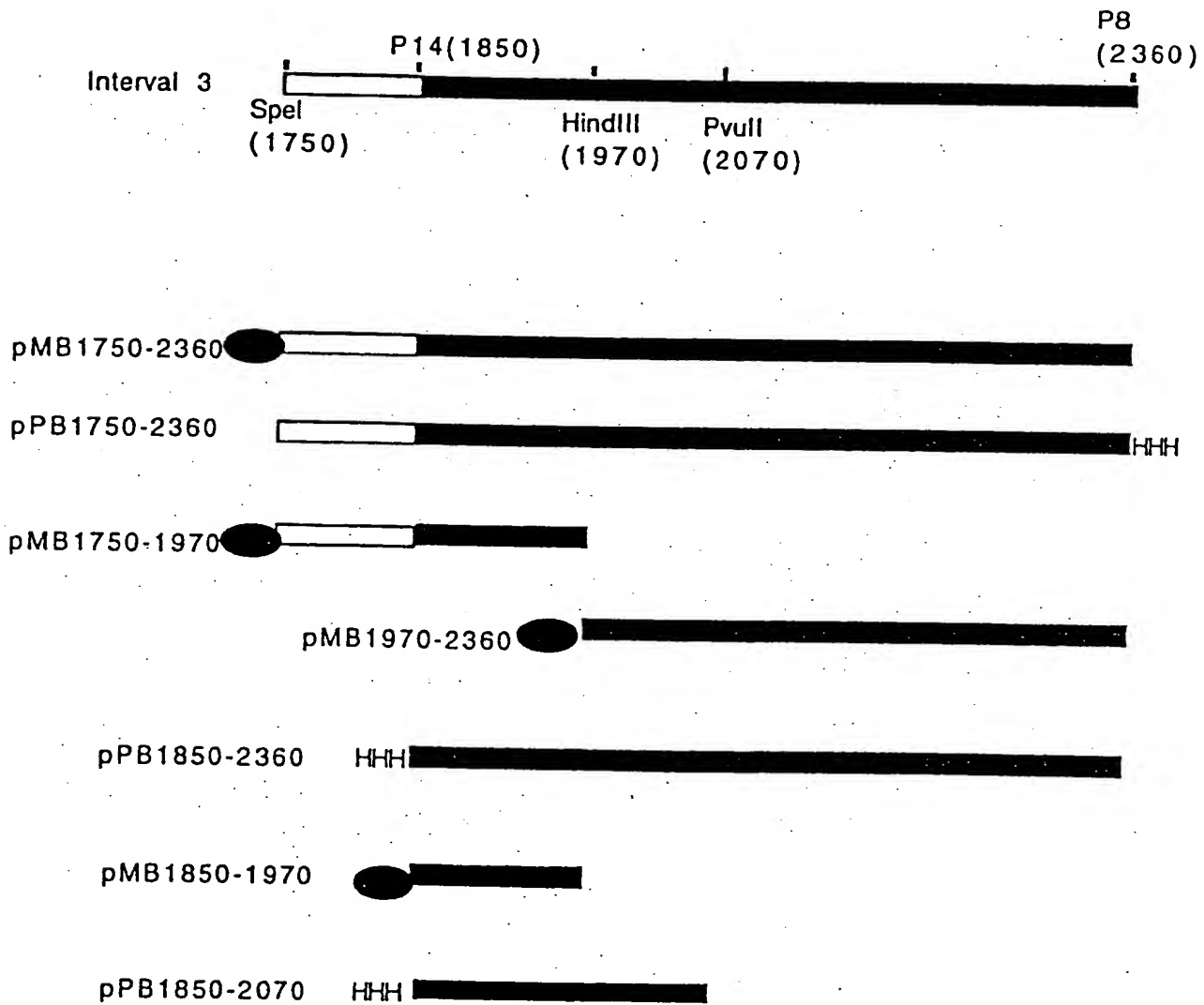
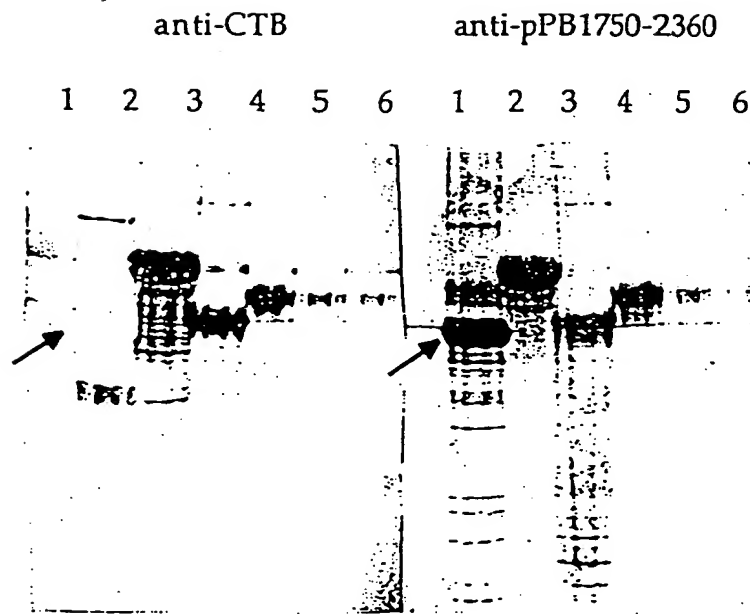


FIGURE 24





# FIGURE 25

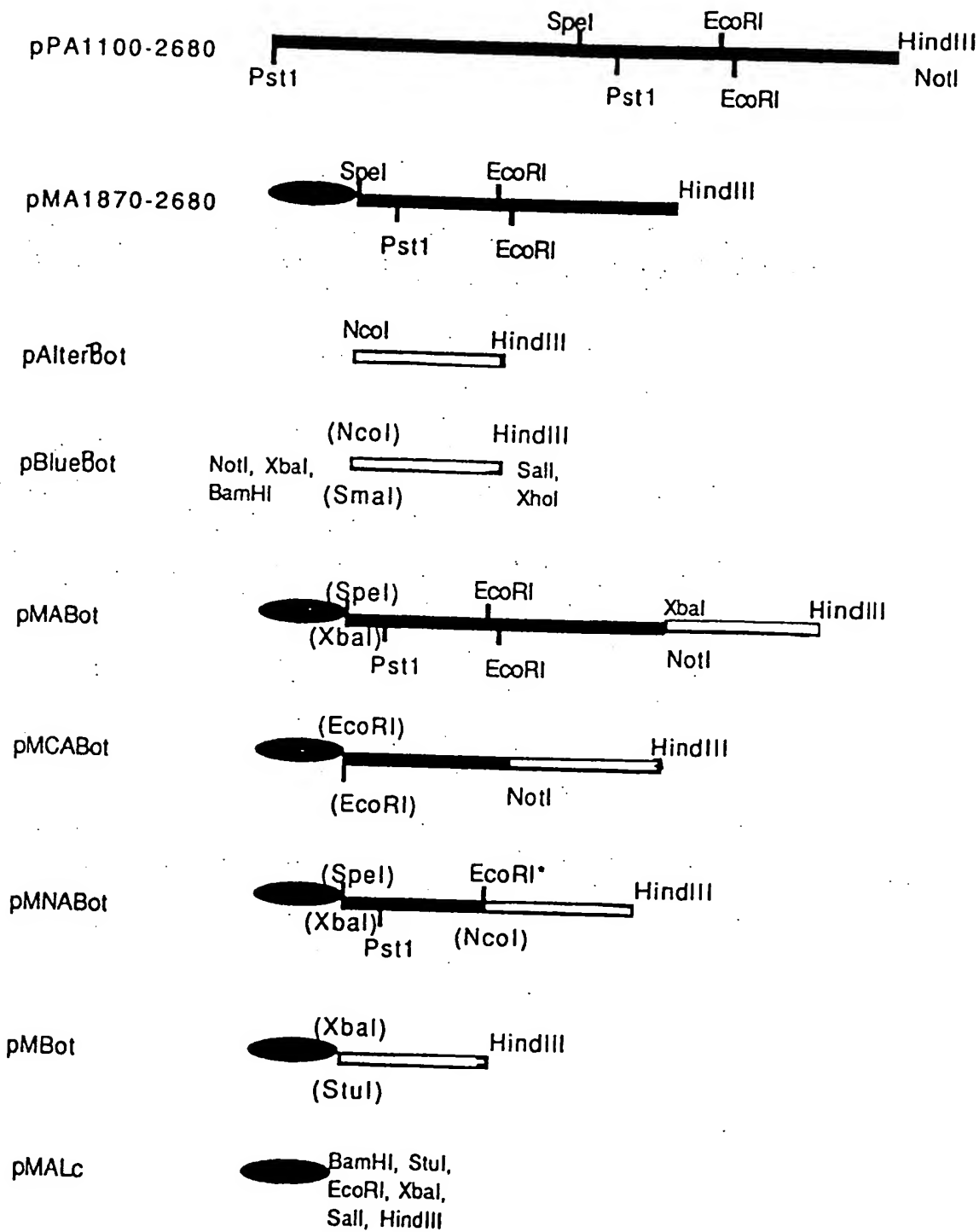
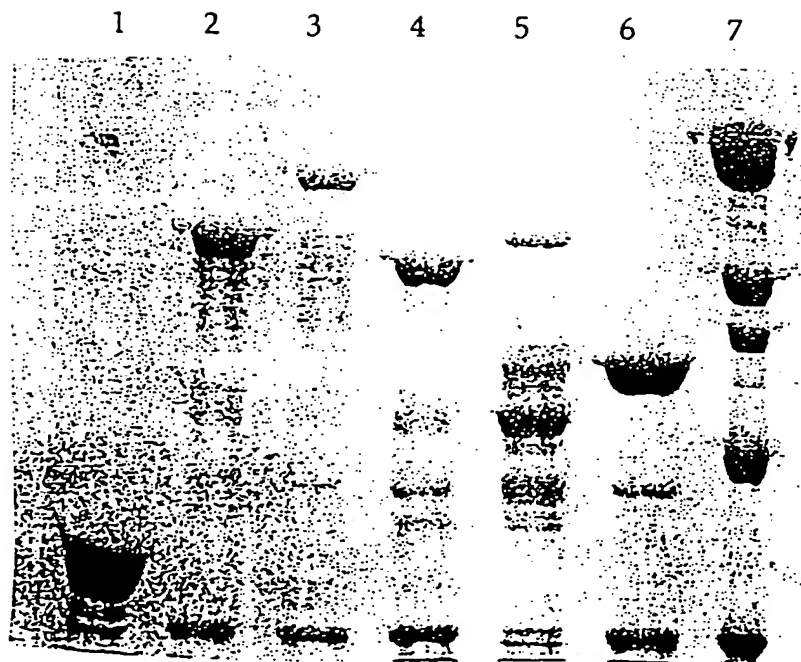


FIGURE 26



# FIGURE 27

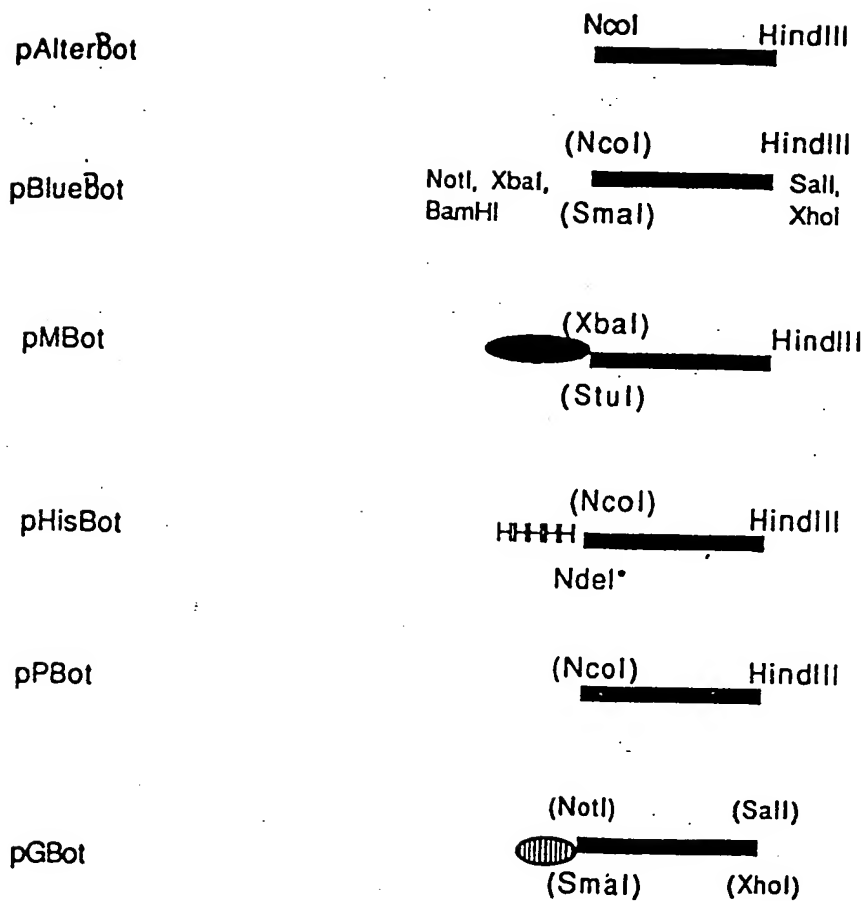
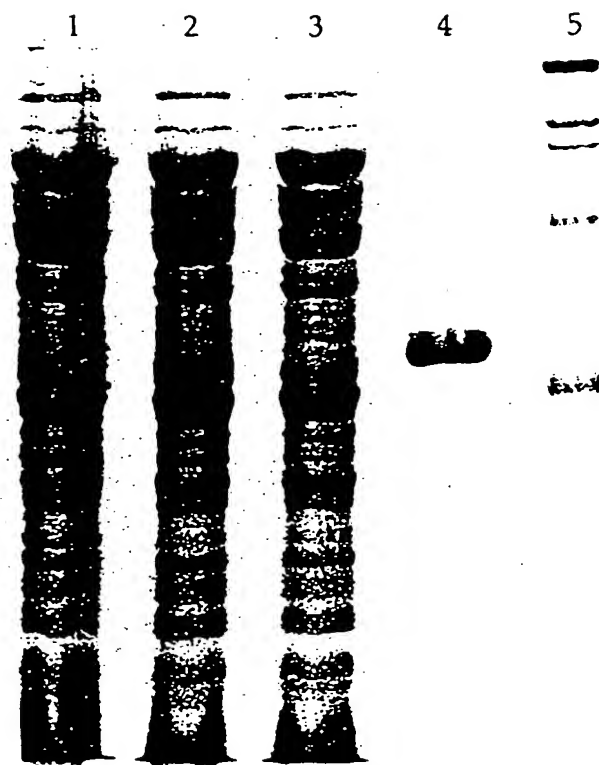
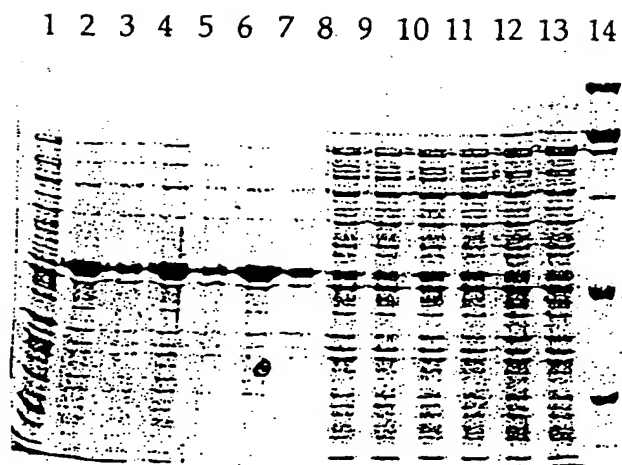


FIGURE 28

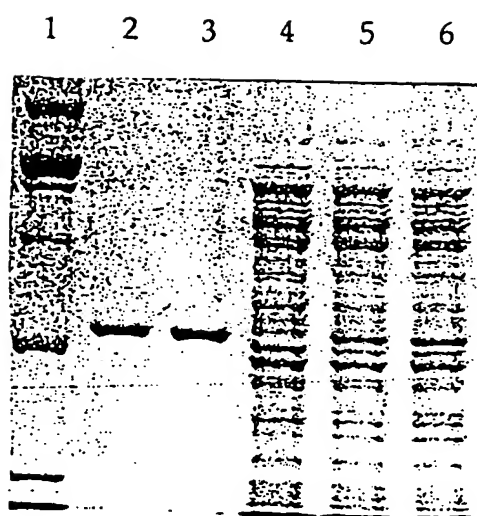


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FIGURE 29



**FIGURE 30**



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FIGURE 31

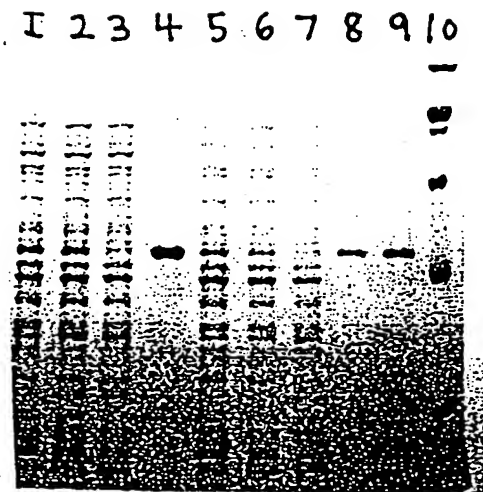
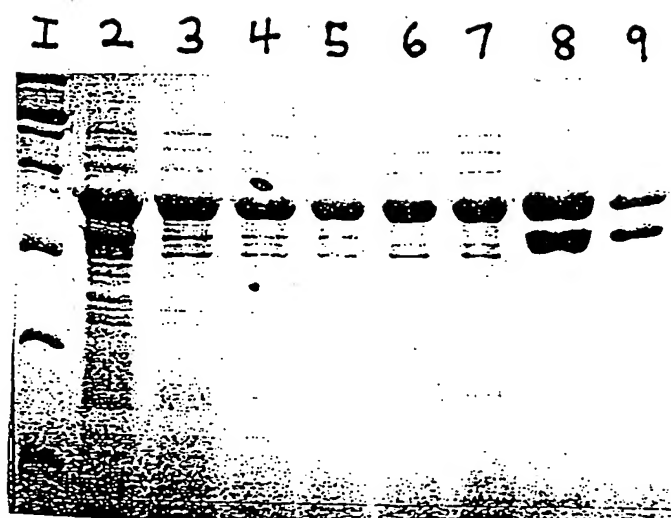


FIGURE 32



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**FIGURE 33**

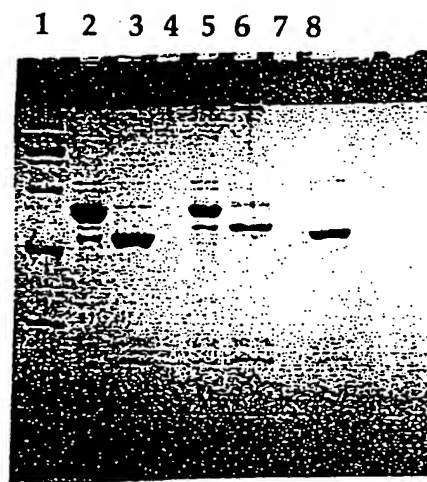
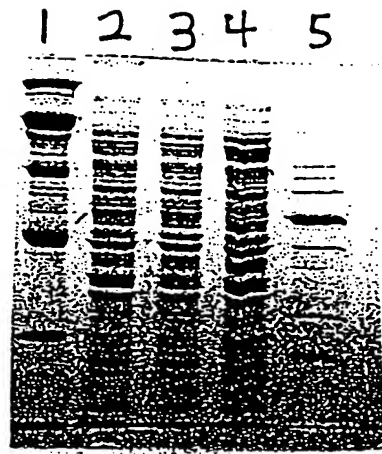
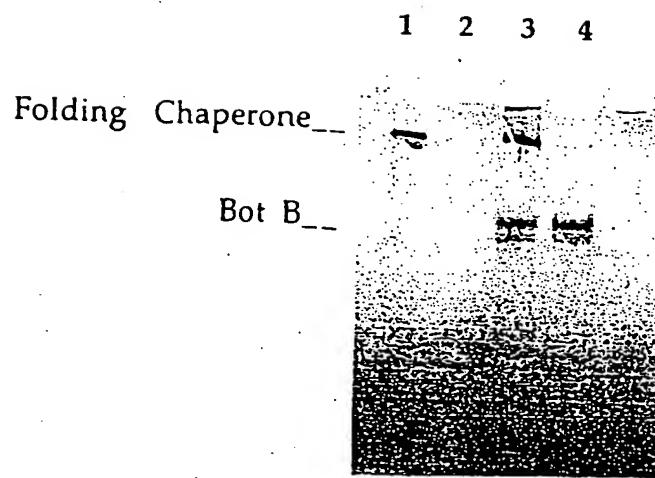


FIGURE 34

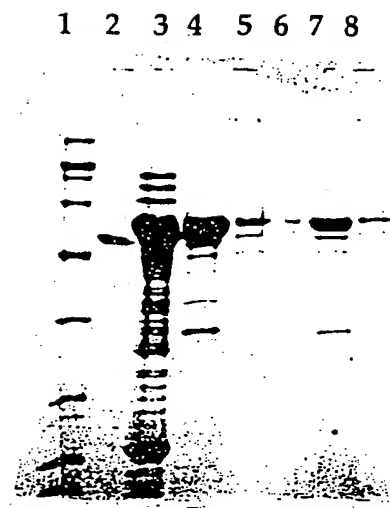


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**FIGURE 35**



**FIGURE 36**



**FIGURE 37**

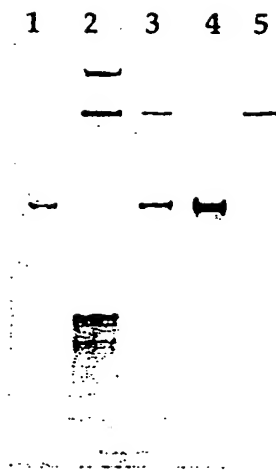


FIGURE 38

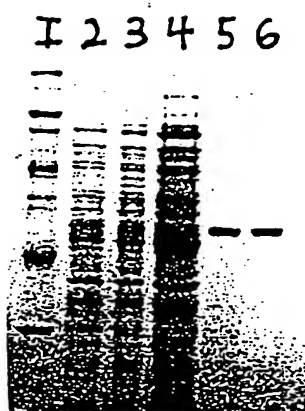


FIGURE 39

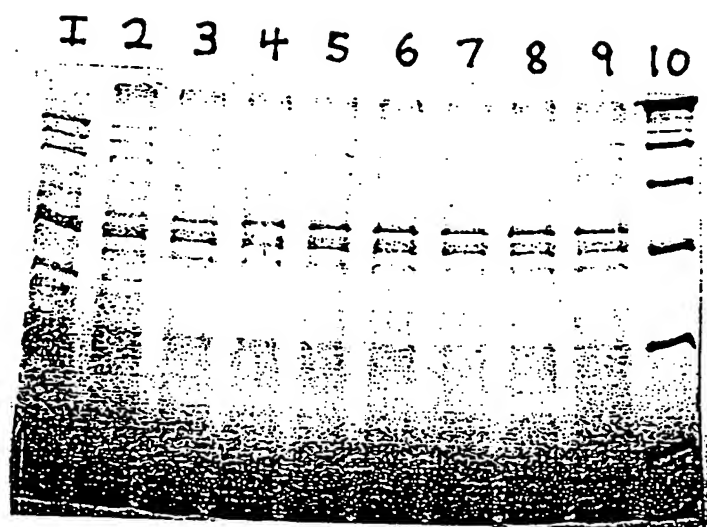


FIGURE 40

